

Applic. No. 09/050,651  
Amdt. dated October 25, 2004  
Reply to Office action of July 23, 2004

Claim Amendments

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): In a pressurized water reactor having at least one high-pressure pump for liquid primary coolant, an apparatus for admitting gas into the liquid primary coolant with hydrogen, comprising:

- a) a suction line leading to the at least one high-pressure pump;
- b) an admission point for feeding the hydrogen into said suction line;
- c) a hydrogen admission line leading to said admission point;
- d) a control device having an inlet side and an outlet side;
- e) a pressure line connected to the high-pressure pump;
- f) a coolant conducting measurement line branching off from said pressure line downstream of the at least one high-pressure pump;

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g) a measuring device incorporated into said coolant conducting measurement line and connected to said inlet side of said control device for measuring hydrogen concentration; and

h) a control valve disposed in said hydrogen admission line and connected to said outlet side of said control device.

Claim 2 (currently amended): The apparatus according to claim 1, including a volume control tank, said coolant conducting measurement line leading into said volume control tank.

Claim 3 (currently amended): The apparatus according to claim 1, including a dewatering system, said coolant conducting measurement line leading into said dewatering system.

Claim 4 (original): The apparatus according to claim 1, wherein the at least one high-pressure pump admits the primary coolant extracted from a coolant loop back into the coolant loop.

Claim 5 (original): The apparatus according to claim 1, including a hydrogen supply, said control valve disposed in

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said hydrogen admission line between said hydrogen supply and said admission point.

Claim 6 (original): The apparatus according to claim 1, including a mixer disposed in said suction line.

Claim 7 (original): The apparatus according to claim 6, wherein said mixer is disposed downstream of said admission point.

Claim 8 (previously presented): The apparatus according to claim 1, including a volume control tank, and a bypass line associated with said volume control tank and having a valve.

Claim 9 (previously presented): The apparatus according to claim 8, wherein said bypass line discharges upstream of said admission point into said suction line between said volume control tank and the at least one high-pressure pump.

Claim 10 (original): The apparatus according to claim 1, wherein said control device is a proportional controller.